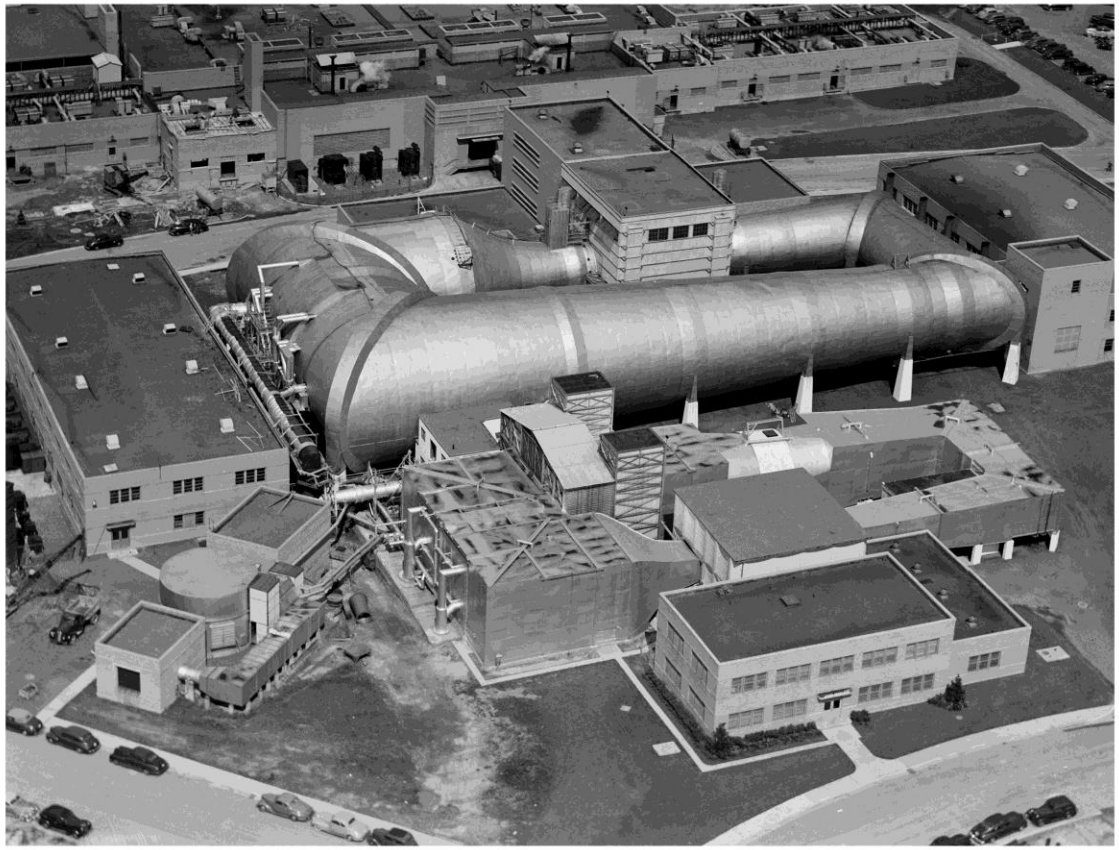
ALTITUDE WIND TUNNEL DEMOLITION

C-1945-13053



National Advisory Committee for Aeronautics
Aircraft Engine Research Laboratory

AWT
A brief history

- Opened in 1944 as first of its kind facility
- Played a crucial role in developing aeronautics for WWII aircraft
- Helped to develop turbojet, ramjet, and turboprop engines
- Later converted to Space Power Chamber (SPC), allowing it to recreate a space environment
- As SPC served a critical role in the emerging space program

Reroute of Piping

Piping rerouted prior to demolition

Steam, condensate, air, and natural gas piping were rerouted prior to demolition activities

Reroute of Piping

Piping rerouted prior to demolition

A pipe bridge and pipe supports were installed along the IRT Building for the rerouted pipe; which was then painted for identification

Reroute of Piping

Piping rerouted prior to demolition

Pipe bridge installed and painted

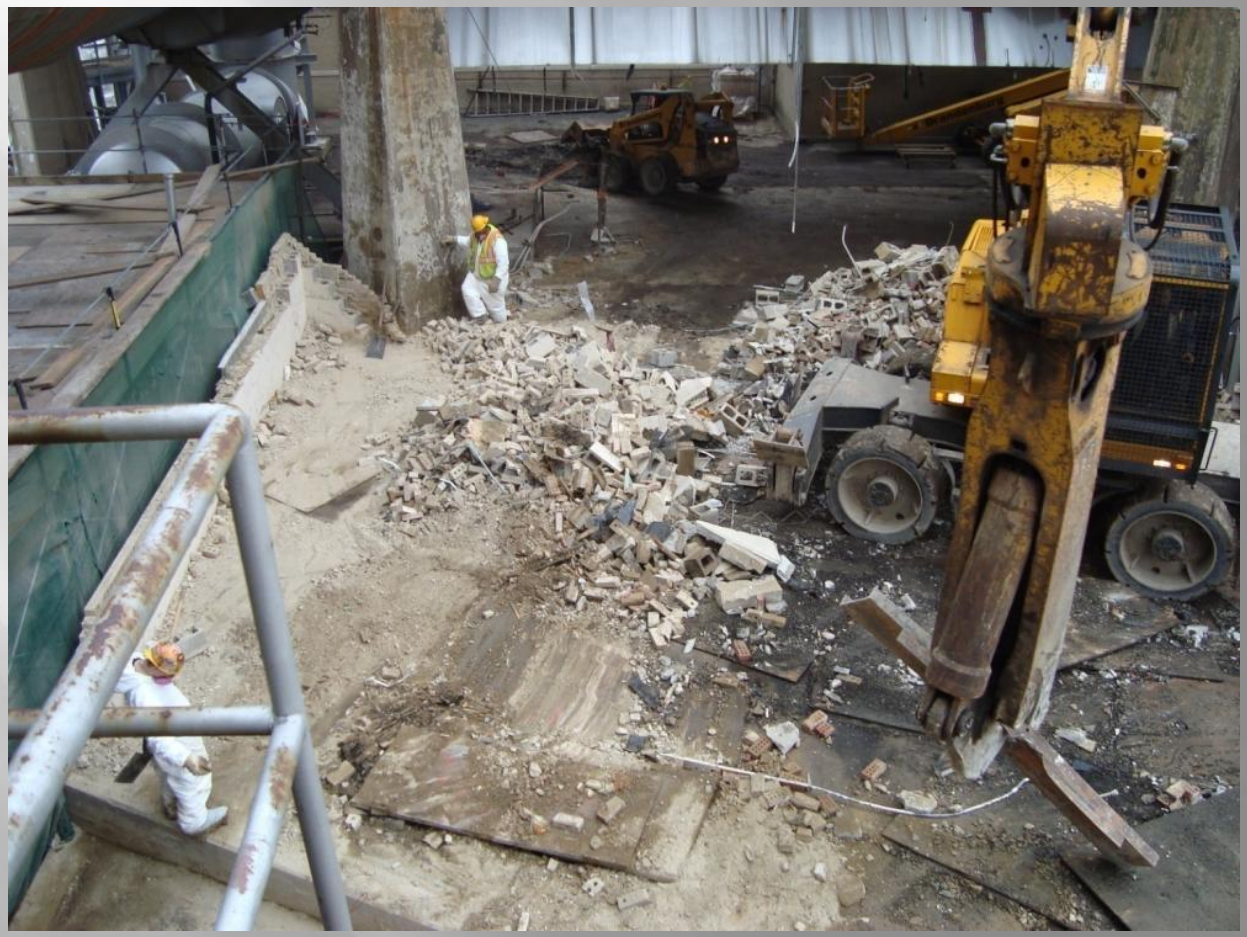
Building 78 Demolition

Removal of Exterior Walls

Walls are demoed and material is removed from site

Building 78 Demolition

Removal of Debris



Building 78 Demolition

Slab over remaining foundation

A concrete slab and hatch are installed over the remaining basement

Exhauster Building
Removal of Generator

Exhauster Building

Removal of Generator – In Progress

A portion of the wall was removed to allow access to the generators

Exhauster Building

Removal of Generator – In Progress

Exhauster Building

Removal of Generator – Partially Removed

The generators are removed from the building and recycled

Exhauster Building
Installation of Floor – Post Demo

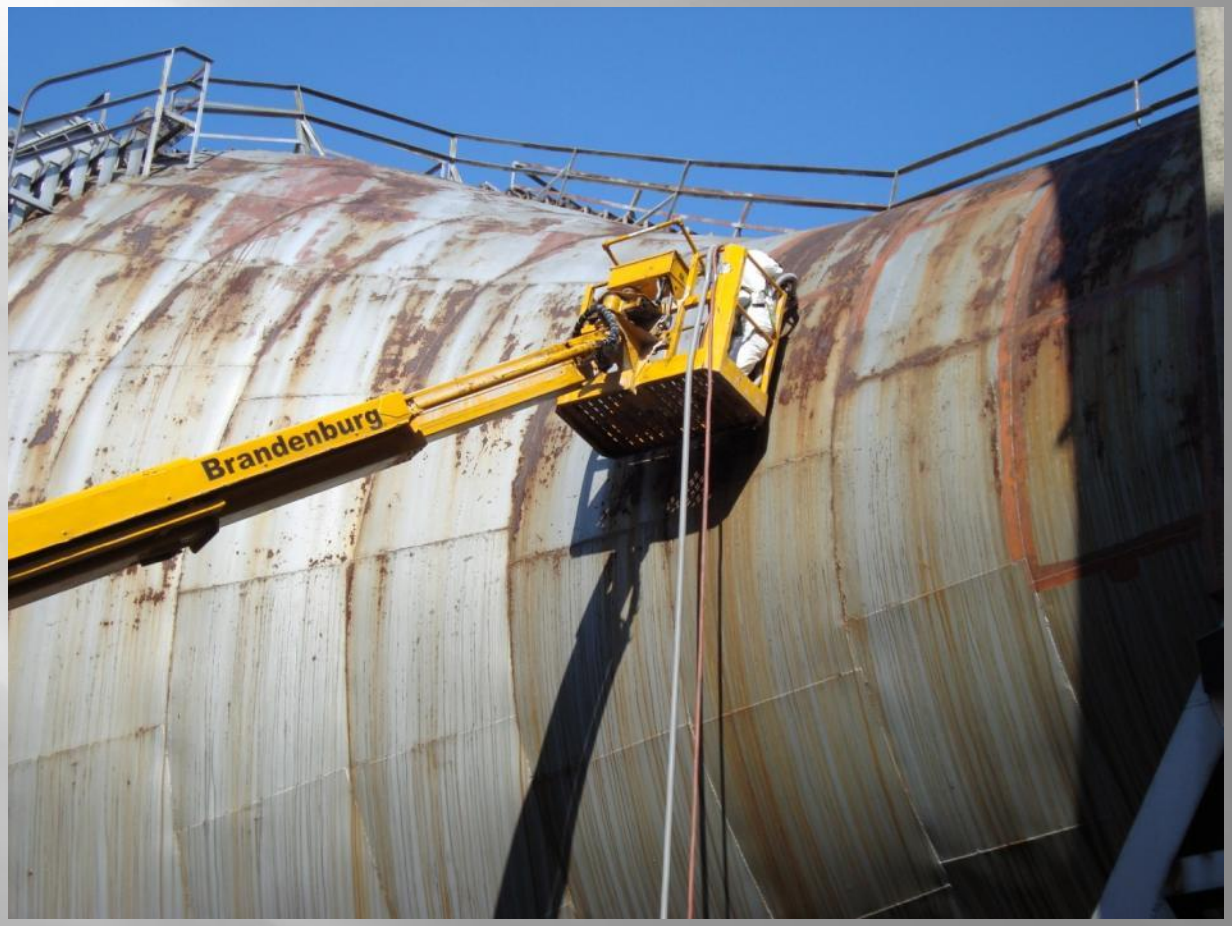
Steel decking installed prior to concrete placement

Exhauster Building

Installation of Floor – Post Demo

Concrete slab in place of generator foundations

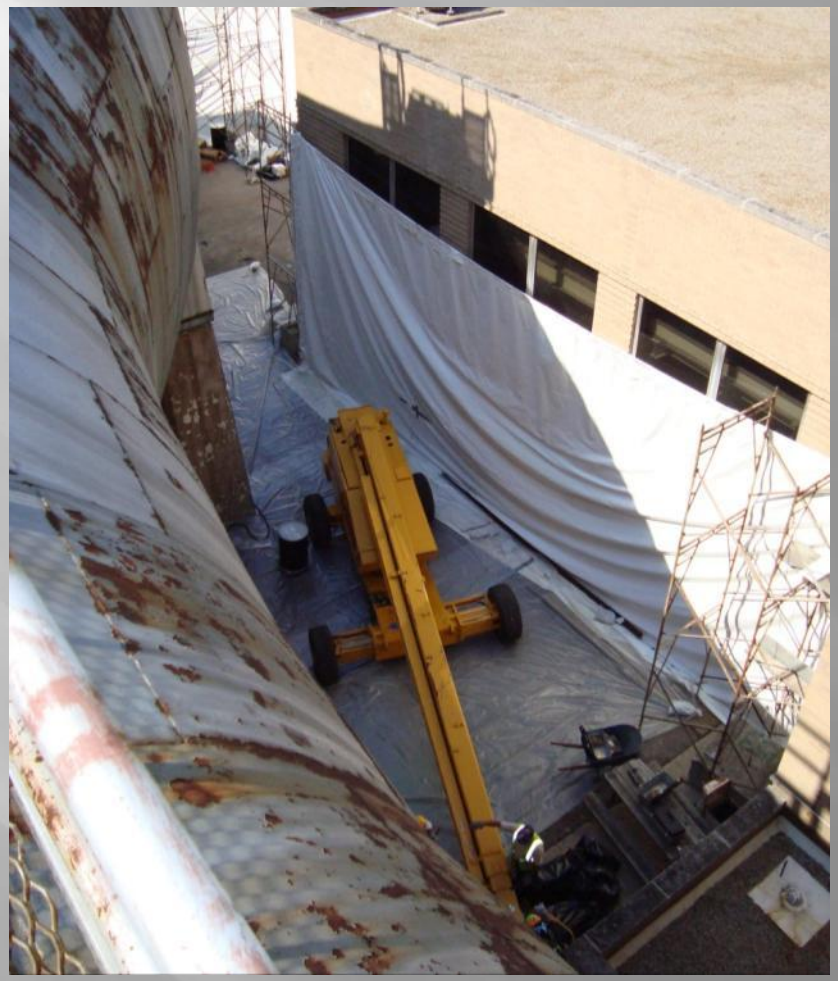
Demolition of Tunnel
Lead Abatement



Lead paint had to be removed from all areas to be torch cut prior to removing the outer shell from the tunnel

Demolition of Tunnel

Lead Abatement

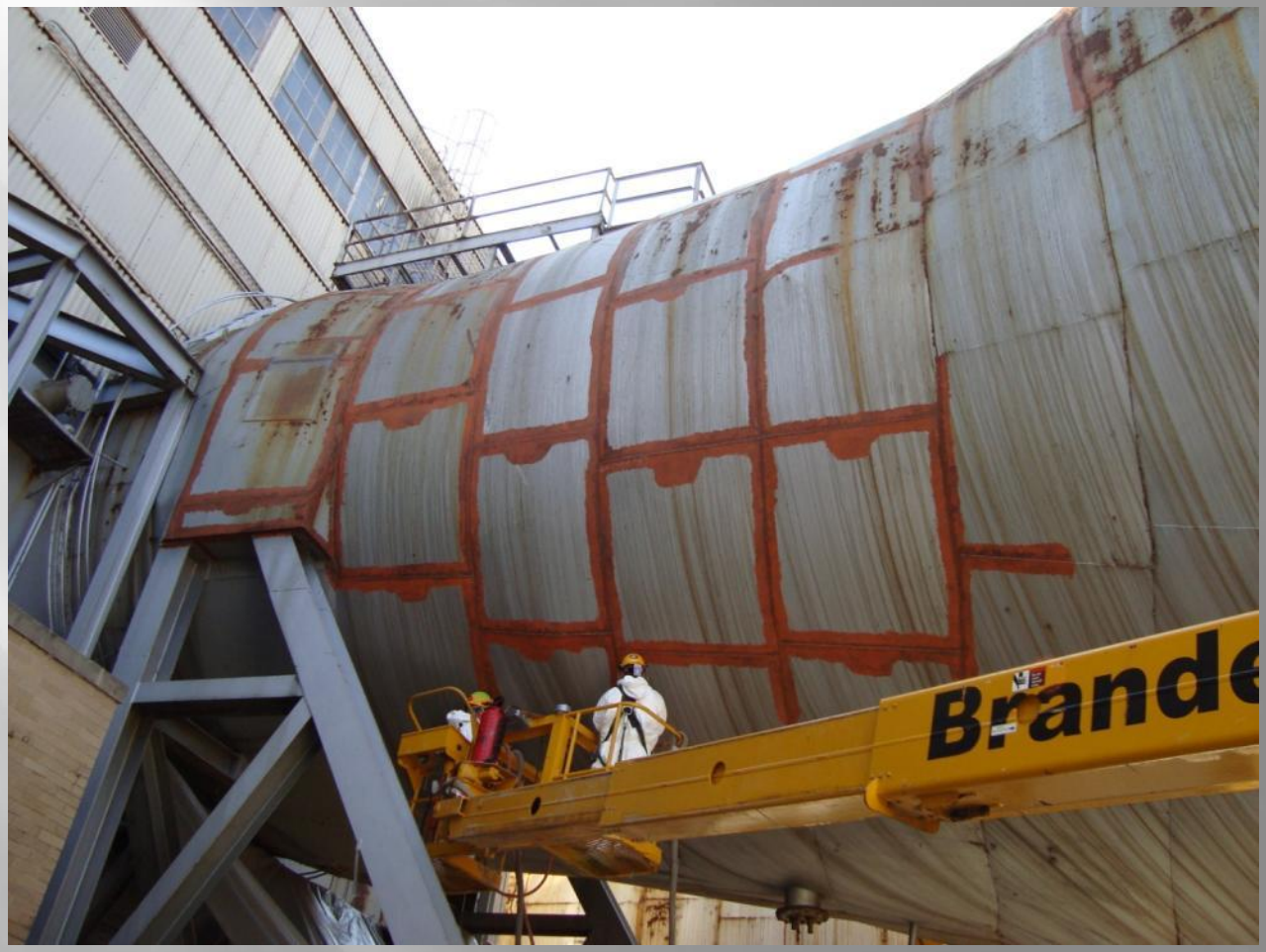


A barrier was installed before lead abatement began

Demolition of Tunnel
Lead Abatement

Workers wore personal protective equipment to control lead exposure – a medical exam process was also implemented

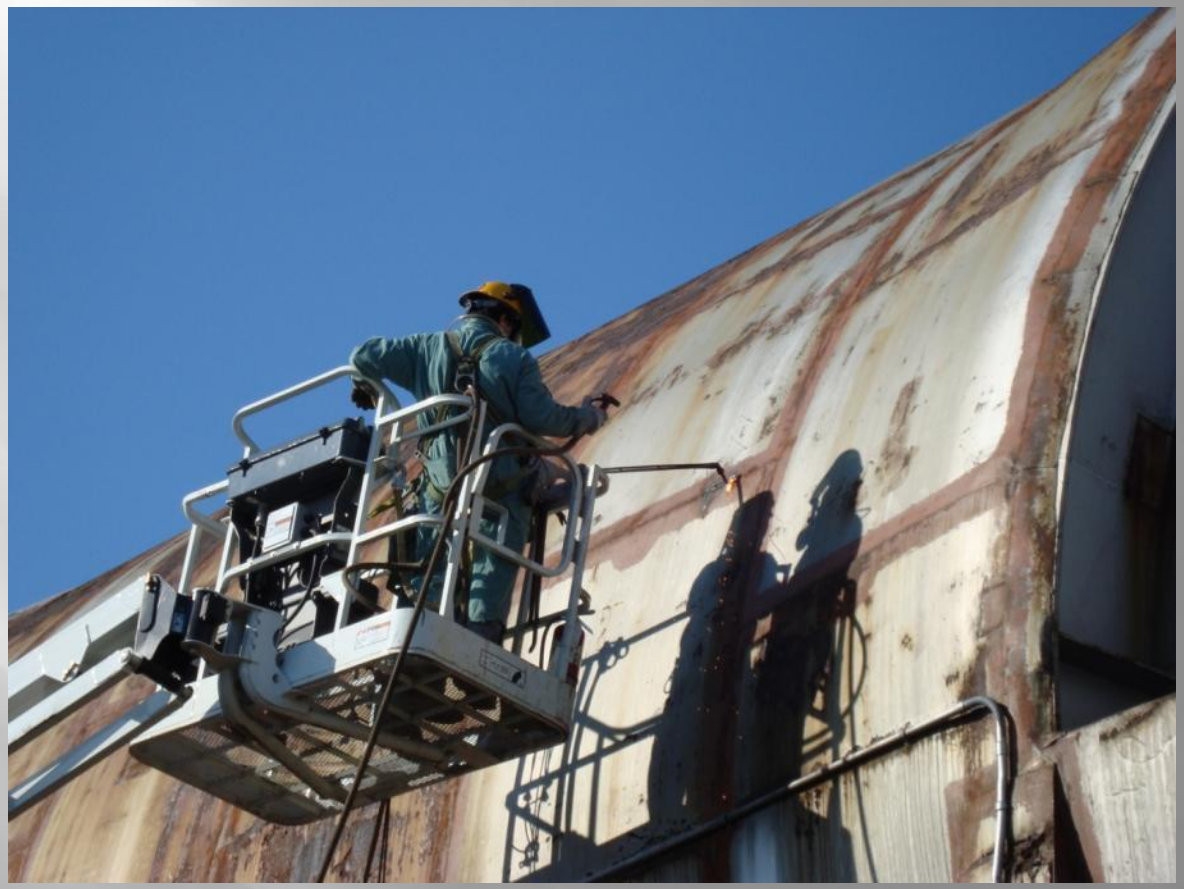
Demolition of Tunnel
Lead Abatement



A needle gun was used to remove paint along the welds – where the panels were to be torch cut

Tunnel Demolition

Removal of Outer Shell and Insulation



Torch cutting the outer shell – notice shadow of 2 workers; one torching, one serving as a fire watch with hose at hand

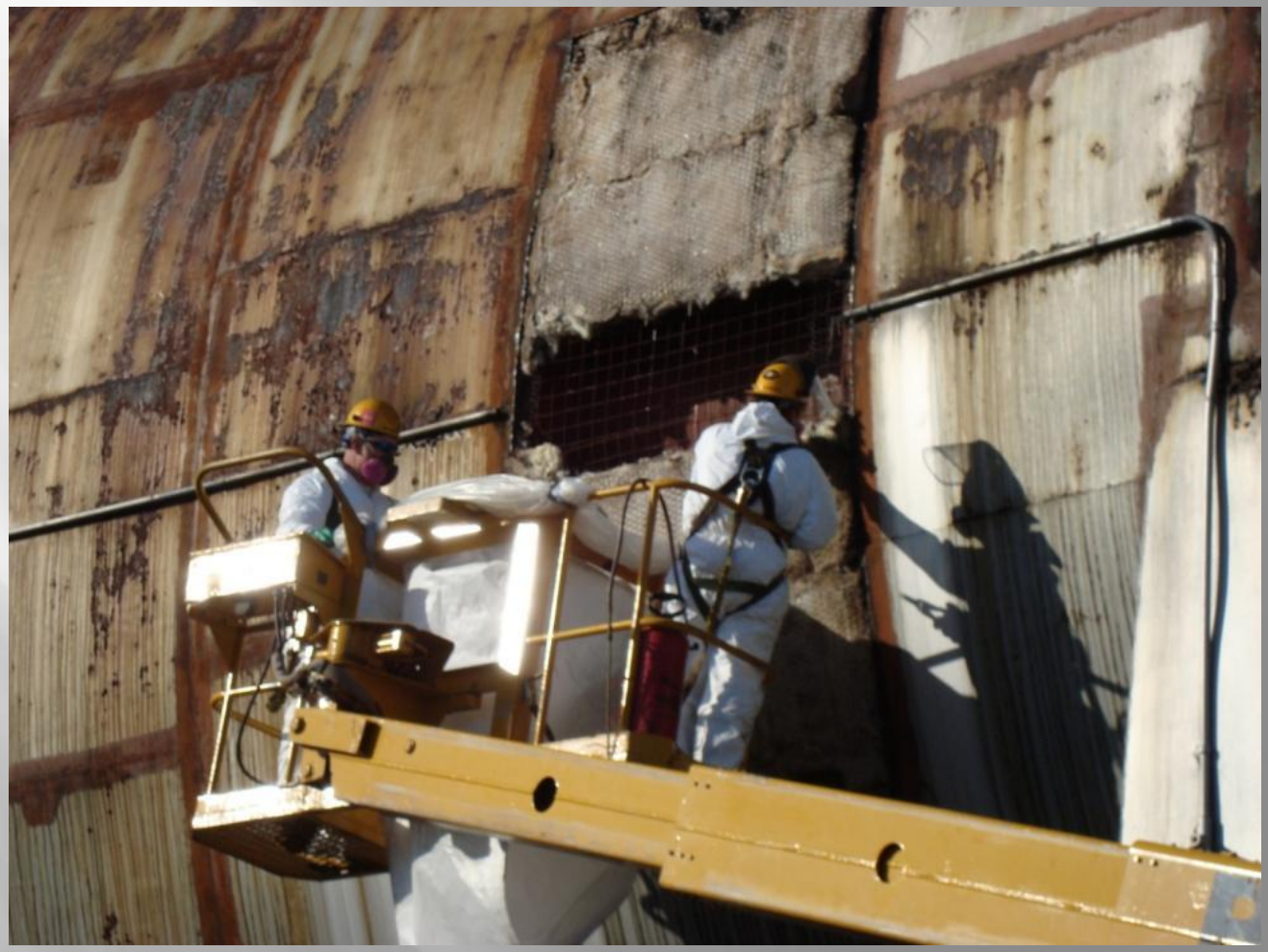
Tunnel Demolition

Removal of Outer Shell and Insulation

The steel plate outer shell is removed, revealing the insulation

Tunnel Demolition

Removal of Outer Shell and Insulation



Insulation is removed, revealing wire fabric below

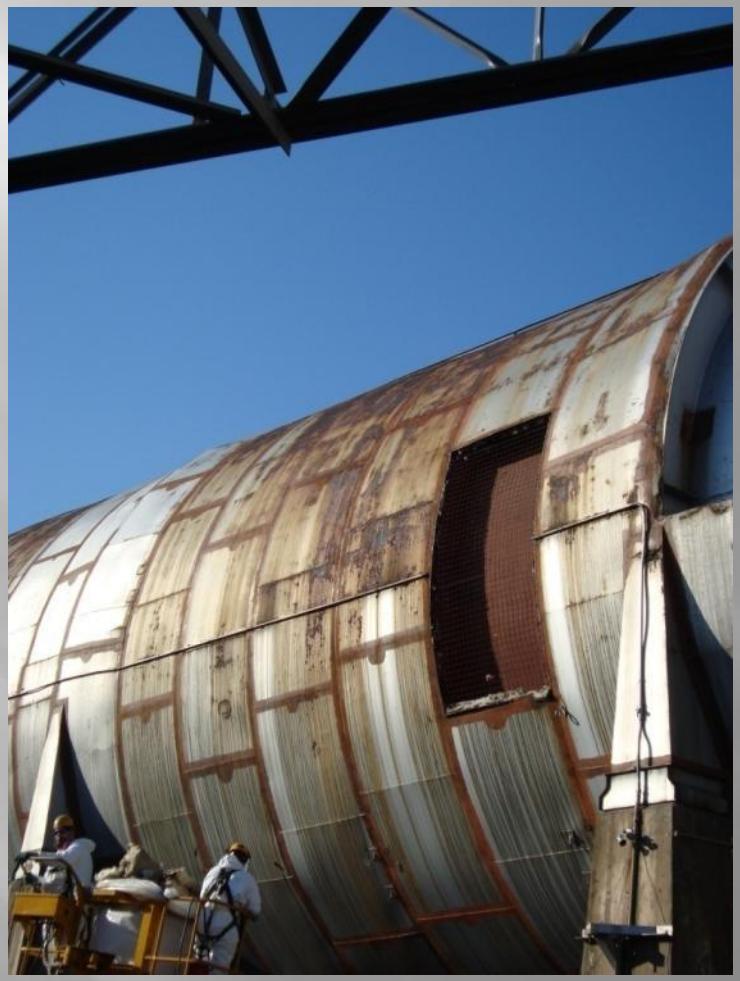
Tunnel Demolition

Removal of Outer Shell and Insulation

Asbestos containing rope used to attach insulation; proper protection was taken due to the material

Tunnel Demolition

Removal of Outer Shell and Insulation



First section of outer shell and insulation removed

Tunnel Demolition

Removal of Outer Shell and Insulation

Large portion of shell and insulation removed, revealing inner shell

Tunnel Demolition

Bulkhead Installed for Space Power Chambers

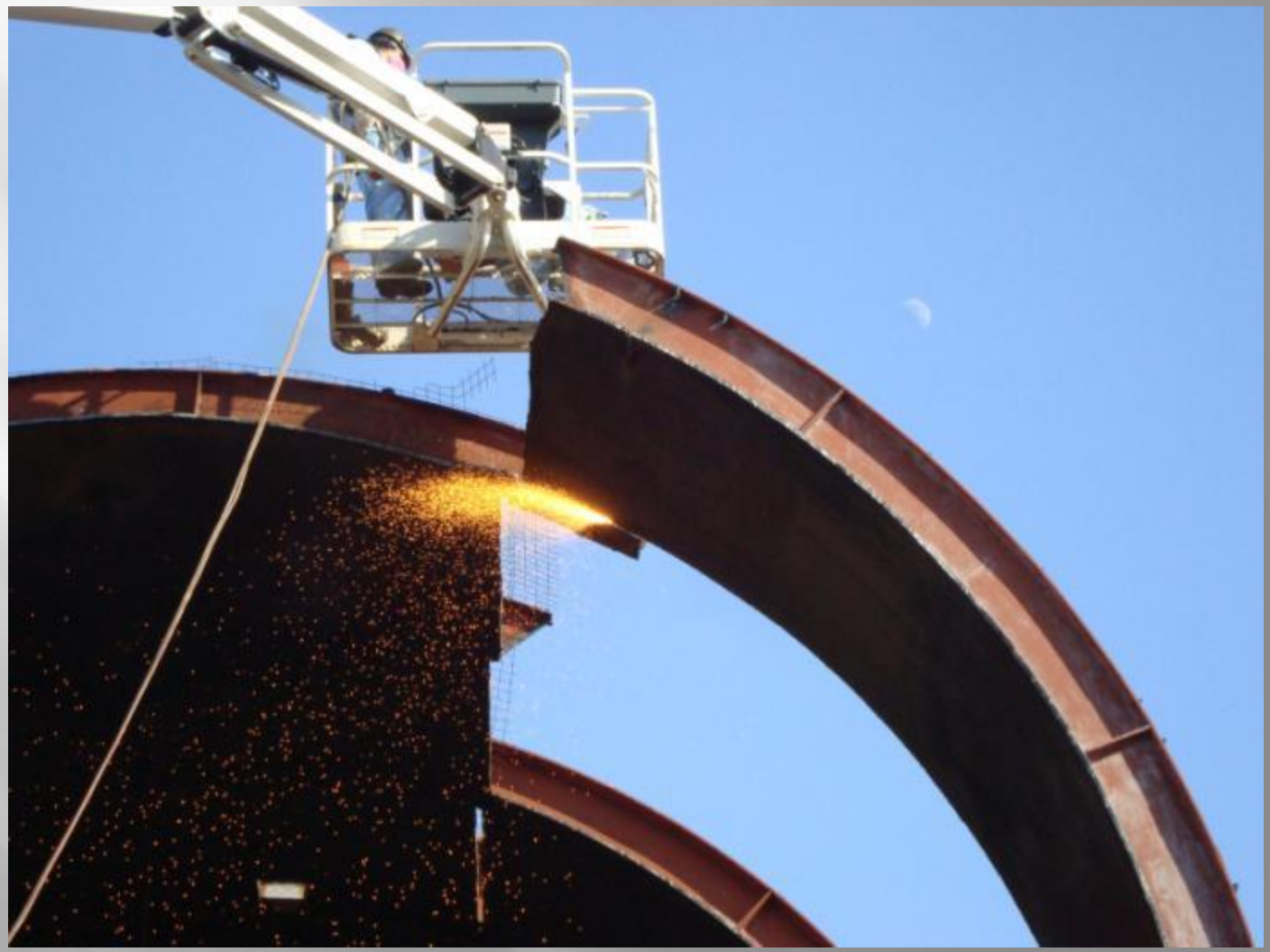
Bulkhead installed in the early 1960's converting AWT to SPC

Tunnel Demolition

Torching and Removal of Inner Shell

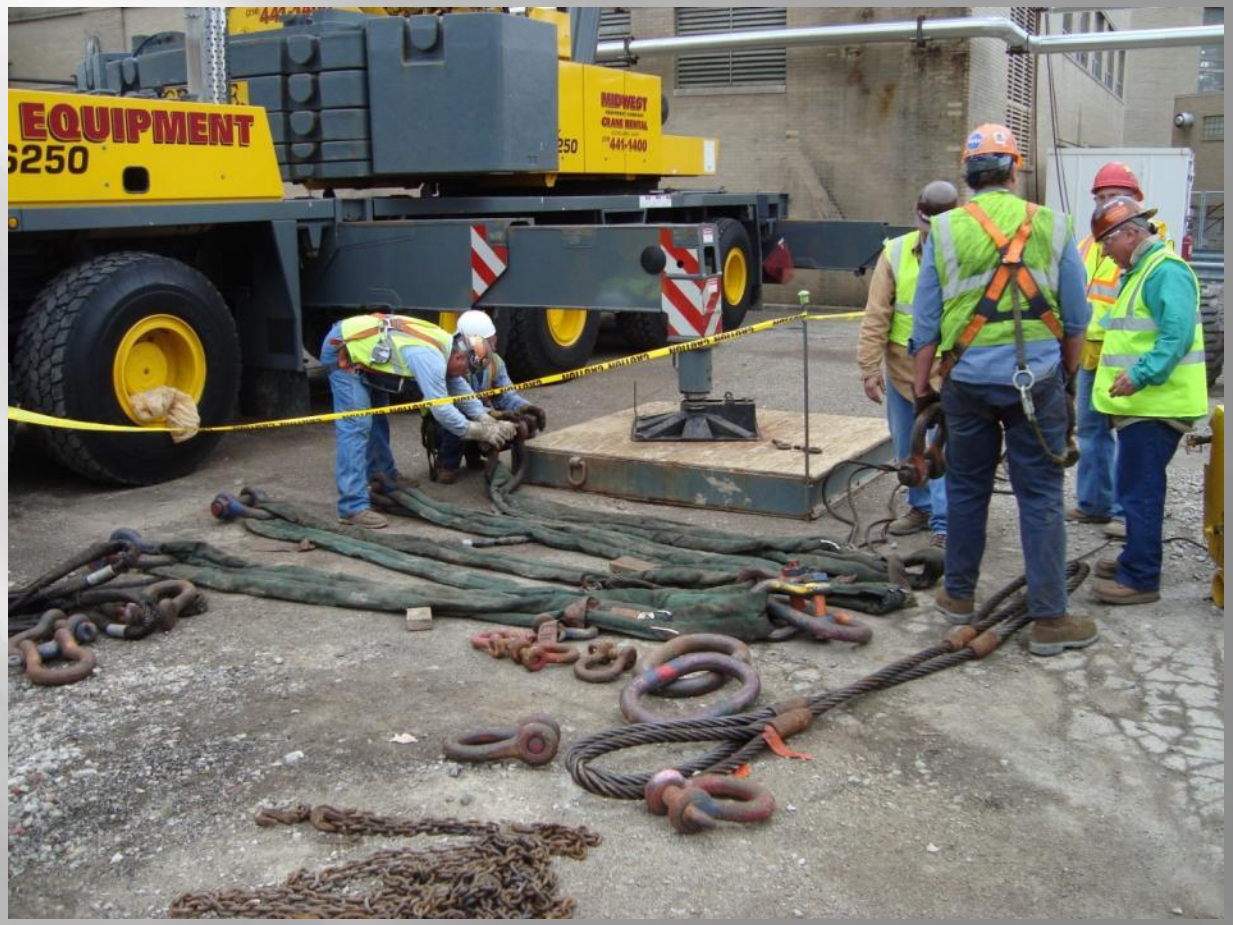
Tunnel Demolition

Torching and Removal of Inner Shell



Removing the Main Drive Unit

Preparing for the Lift



Crane mats are set beneath the crane outriggers and the rigging is prepared prior to the lift

Removing the Main Drive Unit

Picking the Load

The fan drive unit is lifted through the roof of the Exhauster Building

Removing the Main Drive Unit

Setting the unit

Removing the Main Drive Unit

Disassembly prior to recycling

The unit is cut into manageable sections and removed from the site

Building 7 Renovation

Capping the tunnel, painting exposed steel, and removing the asbestos containing Transite panels

Upon completion of tunnel demo; tunnel caps were installed and painted, and asbestos containing Transite panels were removed

Building 7 Renovation

Capping the tunnel, painting exposed steel, and replacing the asbestos containing Transite panels

In progress; notice tunnel cap painted white, and portion of Transite panels removed with new white panels installed

Building 7 Renovation

Capping the tunnel, painting exposed steel, and replacing the asbestos containing Transite panels

Completed south wall

Installing New Wheel Chair Ramp

Placement of new concrete ramp

Providing handicapped accessibility to Building 8

Nearing Completion

The site on 7-15-09

To be completed: panel installation, grading, and asphalt paving